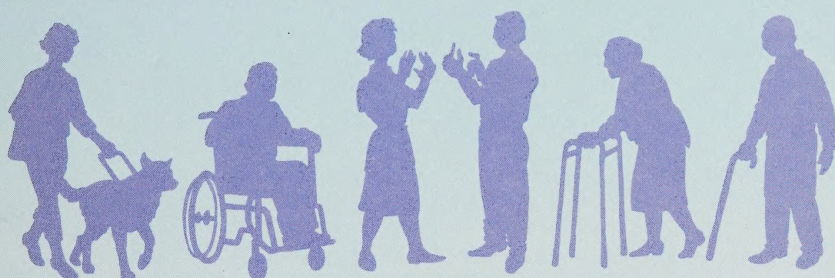


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Eligible Modifications for Residential Rehabilitation Assistance Program for the Disabled



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Eligible Modifications for Residential Rehabilitation Assistance Program for the Disabled

CMHC offers a wide range of housing-related information. For details, contact your local CMHC office.

Cette publication est aussi disponible en français sous le titre *Modifications admissibles aux termes du Programme d'aide à la remise en état des logements pour les handicapés* — LNH 6342.

Canada



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for Residential
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Program for
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CONTENTS

	Page
Introduction	iii
Section 1 — General	1
Section 2 — Approaching and Entering the House or Apartment	3
Section 3 — Doors and Windows	5
Section 4 — Building Services	6
Section 5 — Inside the Dwelling	8
Section 6 — Interior Living Spaces	10
Section 7 — Extensions	12
Section 8 — Therapeutic and Treatment Items	12
Section 9 — Portable Equipment/Furnishings	12
Section 10 — Multiple Unit Buildings	13
Appendix A — Specific Disabilities	15
Appendix B — Publications Referenced in This Brochure	19



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INTRODUCTION

The *Eligible Modifications for Residential Rehabilitation Assistance Program for the Disabled* is intended for use by persons involved in the delivery of the Residential Rehabilitation Assistance Program (RRAP) for the disabled.

Although this document provides an extensive list of modifications, alterations, fixtures and equipment that is eligible for funding under the program, it is not comprehensive. Where items are encountered that are not covered in this document, and there is some question whether they are beyond the intent of the program, Canada Mortgage and Housing Corporation (CMHC) or the Provincial Housing Agency where the province is the active party delivering the program should be consulted.

For minimum, maximum and suggested dimensions, required clearances and so on, the publications *Housing Disabled Persons* by CMHC (NHA 5467) and *Barrier Free Design* by the Canadian Standards Association (CSA) should be consulted. For additional guidance in determining appropriate modifications and equipment, public health nurses, occupational therapists, physiotherapists, doctors, service agencies for the disabled and rehabilitation centres should be consulted. The publication *A Modification Checklist* (NHA 5895) may also be used by delivery staff and applicants to assist in determining modifications.

Program Objective

The Residential Rehabilitation Assistance Program for the disabled provides assistance for the modification of existing home-owner and rental housing to improve the accessibility of the dwelling unit for disabled occupants.

Within this program, a disabled person is "any person who, because of one or more persistent physical, psychiatric, learning or sensory disabilities is unable to ensure by himself/herself the necessities or social life of a person without a disability."

Choosing Modifications/Cost-effectiveness

When identifying essential or desired modifications, there may be more than one method to make a particular component accessible. The least costly is not always chosen. For example, a ramp will usually be less costly than a chair lift, but if a chair lift is more desirable, it may be considered.

The approved modifications, however, must be cost-effective according to the choice of materials and so on. Use reasonable thought and discretion when determining the scope of

the modification. For example, if a landing is built to provide manoeuvring space outside an entrance, the dimensions should be according to those cited in *Housing Disabled Persons* and the *Barrier Free Design*.

Future Requirements

When reviewing accessibility needs, remember that the disability may be progressive. If further modifications will be required in the near future, it may be more practical and less costly to meet current as well as future modification requirements simultaneously.

SECTION 1. GENERAL

A. General Requirements

- 1) Modifications to provide basic accessibility for disabled occupants are eligible.
- 2) To improve accessibility, the dimensions suggested in the CMHC publication *Housing Disabled Persons* (NHA 5467) or the CSA publication *Barrier Free Design* should be used wherever possible.
- 3) To identify design features, modifications and appropriate equipment required for a particular applicant, the relevant CMHC publications and *Barrier Free Design* should be used. If required, public health nurses, occupational therapists, physiotherapists, doctors, service agencies for the disabled and rehabilitation centres should be consulted.
- 4) To be eligible for RRAP for the disabled, the home-owner unit or project in which a rental unit is located must meet a minimum standard of health and safety. For RRAP purposes, *minimum standard* means a reasonable quality of structural soundness and fire safety and a reasonable quality of heating, plumbing and electrical systems, where these systems exist or are required by the local authority. *Reasonable quality* is determined by the local authority having jurisdiction or, in the absence of a local authority, by CMHC/active party. Work required to meet a minimum standard is not eligible under RRAP for the disabled; however, home-owner applicants may be eligible for home-owner RRAP assistance. **Note: Any work required to meet these criteria may be carried out simultaneously with accessibility modifications.**

B. Eligible Modifications

confirmation
of
modification
requirements

- 1) Modifications shall be related to the disabled occupant's disability. Where it is not evident that the accessibility modifications are related to the disability and required for accessibility, confirmation from a qualified expert, such as a physician or physiotherapist, should be obtained.
- 2) Modifications shall be related to housing and/or shall provide access to permanently installed, basic facilities within the dwelling.

used or
second-hand
equipment

- 3) Used or second-hand equipment, such as bath lifts, stair glides and chair lifts, is eligible. **Note: The applicant is responsible for ensuring that any used or second-hand equipment is safe to use and is properly installed. A professional, such as mentioned in 1.A.4), should be asked to assess the equipment before purchasing it.**

C. Ineligible Modifications

- 1) Ineligible items include the upgrading of substandard building components and systems that are eligible for funding under home-owner RRAP.
- 2) Therapeutic or supportive care-related items, such as whirlpool baths and swimming pools, are **not eligible**.
- 3) Items designed to facilitate housekeeping, such as central vacuum systems, dishwashers and so on, are **not eligible**.
- 4) Except as allowed in Section 6.A., household appliances and furnishings, draperies, area rugs and so on are **not eligible**.
- 5) Portable equipment designed for mobility purposes or care, such as wheel chairs, walkers, dialysis equipment and so on, is **not eligible**.

D. Specifications, Permits, Fees and Drawings

- 1) Work funded under RRAP for the disabled shall be described clearly in a work write-up that includes all necessary quantities, dimensions, drawings and other explanatory material to enable contractors to submit bids.
- 2) Legal fees, building permits, inspection fees and building services for work funded under RRAP are eligible.
- 3) The preparation of architectural drawings and specifications for work funded under RRAP is eligible.

SECTION 2. APPROACHING AND ENTERING THE HOUSE OR APARTMENT

A. At the Site

parking

- 1) A parking space for each vehicle to be used by a disabled occupant is eligible. The size of the parking space should allow the complete opening of doors in order to transfer a wheel chair or a disabled occupant in and out of the vehicle.

walk-ways

- 2) Paving the area allowed in 1) is eligible.
- 3) Wide walk-ways with slip resistant surfaces and without abrupt changes in level to provide access to the street, entrances, and other outside areas used for recreation and household chores are eligible. **Note: Walk-ways that are to be used as fire escape routes and are parallel to the building should be situated away from the building.**

B. Ramps and Chair Lifts

ramps

- 1) Ramps required for access to residential buildings and dwellings are eligible.
- 2) Handrails, edge guards and slip resistant surfaces are eligible.

- | | |
|-------------|---|
| | 3) The construction or installation of a canopy designed to shelter the ramp is eligible. Note: Because the design of a ramp depends on the specific needs of the disabled occupant, the details should be reviewed with a knowledgeable professional and should be designed in accordance with <i>Housing Disabled Persons</i> or the <i>Barrier Free Design</i>. |
| chair lifts | 4) Chair lifts, if ramps are not practical or desirable, are eligible. |
| | 5) Sheltering chair lifts to ensure operation during winter is eligible. |
| | 6) Making more than one existing entrance accessible is eligible, if required to give full access to the property. Note: When choosing between a ramp or a lift, remember that this feature will also be used in emergencies. |

C. Carports and Garages

- | | |
|--------------|---|
| carport | 1) A carport designed to provide a sheltered direct access area from a vehicle to the dwelling is eligible. |
| | 2) The modification of an existing garage or carport to accommodate a vehicle used by the disabled occupant is eligible. |
| | 3) The construction of a garage is not eligible . |
| | 4) Where there is an existing garage, an automatic door opener controllable from inside and outside the garage is eligible. |
| transfer aid | 5) A transfer aid, such as a trapeze, hung from the ceiling of a garage or carport used to transfer a disabled occupant from a wheel chair is eligible. |
| lighting | 6) A three-way switch to allow the garage or carport light to be controlled from inside or outside the house is eligible. |

D. Entrances

- 1) A level entrance area on either side of the door to allow access for wheel chairs and persons with other types of disabilities, who require, for example, walkers or seeing-eye dogs is eligible.
- 2) The construction of a canopy designed to shelter the entrance is eligible.
- 3) Permanent shelves for packages located beside doors and mailboxes to free hands are eligible.

SECTION 3. DOORS AND WINDOWS

A. Doors

- | | |
|----------------------|---|
| security | 1) The relocation or modification of door openings or door hardware is eligible. |
| | 2) The installation of a security lock, chain door interviewer or peephole on the door is eligible. |
| | 3) The provision of wider doors, removal of existing doors or replacement of doors with a more suitable type is eligible. |
| door closer/
pull | 4) An automatic door closer that provides enough time for slow moving disabled occupants is eligible. Door pulls or "D" handles are eligible. |
| door
hardware | 5) The replacement of existing door hardware with lever-type handles and easy to use locks at appropriate heights and the installation of kickplates are eligible. |
| storm doors | 6) The removal of storm doors to permit easier access to dwellings is eligible. |
| thresholds | 7) The installation of bevelled strips on either side of a threshold to provide manoeuvrability of a wheel chair over the threshold is eligible. Removal of thresholds is eligible. |
| | 8) The installation of lighting to illuminate the keyhole is eligible. |

- 9) A mail opening in the door with a catch basket on the inside at the appropriate level is eligible.
- 10) The installation of a lighted call/doorbell for occupants with hearing disabilities is eligible.

B. Windows

- 1) The lowering of windows in frequently used rooms, such as the living room or bedroom, to allow a disabled occupant to see outside from a sitting or lying position is eligible.
- 2) The modification or replacement of windows or window hardware to ensure ease of opening, closing and locking windows is eligible.

SECTION 4. BUILDING SERVICES

A. General

upgrading
services

- 1) Only the costs associated with the accessibility modifications to existing plumbing and electrical systems are eligible.

B. Electrical

electrical
switches

- 1) The lowering or relocation of light switches and the installation of locator light switches or additional switches are eligible. The push pad or rocker-type switch may be the best choice.

outlets

- 2) The raising of convenience outlets is eligible.
- 3) The wiring and installation of electrical outlets to accommodate special aids and equipment are eligible.

electrical
panel

- 4) The lowering of the main electrical panel or the relocation of the panel to the main floor making it accessible to the disabled occupant is eligible.

thermostat
controls

light
fixtures

- 5) Upgrading an existing, substandard electrical system, which requires accessibility modifications, except as noted in 6), is **not eligible**.
- 6) Upgrading an existing electrical panel to accommodate increased loads resulting from accessibility modifications is eligible.
- 7) The lowering of thermostatic controls and the installation of magnifying strips to the wall thermostat are eligible.
- 8) Replacing or adding light fixtures to increase lighting in task areas, at stairs, ramps and so on is eligible.
- 9) All modifications to the electrical system must be in accordance with the authority having jurisdiction.

C. Heating, Cooling and Ventilation

- 1) The modification of a heating system, installation of a central cooling system and modification/installation of a ventilation/air filtering system to assist disabled occupants with proven cases of severe allergies are eligible.
- 2) The replacement of a solid fuel burning heating system with an electric-, oil- or gas-fired/forced air system where the disabled occupant is unable to maintain the fuel supply to the solid fuel burning system is eligible.
- 3) Except as permitted in 2), the repair or replacement of a heating system is **not eligible**.
- 4) Such measures as enclosing or insulating radiators and other heating pipes or ducts to protect the disabled occupant from burns are eligible.
- 5) All modifications to the heating system must be in accordance with the authority having jurisdiction.

D. Plumbing

- 1) The modification of an existing plumbing system, such as rerouting piping, to accommodate accessibility modifications is eligible.
- 2) The installation of a pressurized piped water supply system and sewage disposal system where none exists and the disabled occupant is unable to maintain or use the current systems is eligible.
- 3) Upgrading an existing, substandard plumbing system that requires accessibility modifications is **not eligible**.
- 4) All modifications to the plumbing system must be in accordance with the authority having jurisdiction.

SECTION 5. INSIDE THE DWELLING

A. Entrance Hallway

- 1) The modification of entrance hallways to provide adequate turning space, clear of door swings is eligible.
- 2) The modification of clothes closets and installation of appropriate closet doors to make closets accessible to disabled occupants are eligible.

B. Corridors

- 1) The modification of corridors and archways or doorways to provide manoeuvring space for a wheel chair or other ambulatory aid is eligible.
- 2) The installation of handrails in corridors at an appropriate height for the disabled occupant is eligible. When handrails end, they should curve into the wall or have some other design feature that indicates to the touch that they are ending.

handrails

protective
surfacing

- 3) Protective surfacing, such as wainscoting and corner moldings, to protect walls and corners in areas of high usage from wheel chair wheels and footplates is eligible.

C. Level Changes and Stairs

stairs

- 1) The installation of a highly colored or reflective strip on the front edge of each stair nosing to assist a visually impaired occupant is eligible.
- 2) The installation in stairways of handrails with tactile cuing, such as notching, for the purpose of identifying changing levels is eligible.

elevating
devices

- 3) The installation of interior elevating devices, such as stair glides, vertical home lifts or wheel chair lifts, to assist the disabled occupant reach different floor levels is eligible.

ramps

- 4) The installation of interior ramps to overcome small differences in levels is eligible.
- 5) The enclosing of open riser stairs is eligible.

D. Floor Finishes

- 1) The removal of existing floor covering to install floor covering appropriate to the disabled occupant is eligible.
- 2) The installation of slip resistant surfaces on stair treads and visual aids, such as strips on treads or risers, is eligible.

E. Fire Safety

alarms

- 1) The installation of sound and sight fire alarms, that is, multiple cue alarm systems is eligible. **Note: When undertaking accessibility modifications, fire retardant materials should be considered whenever possible.**

F. Assistance Buzzer/Alarm

- 1) The installation of fixed alarms to be used by a disabled occupant in the event of a fall or sudden illness is eligible.

SECTION 6. INTERIOR LIVING SPACES

A. The Kitchen

- 1) The modification, enlargement or redesign of a kitchen to accommodate a disabled occupant is eligible. The installation of lowered work surfaces, accessible switches for exhaust fans, mirrors to see into pots, heatproof accessible surfaces and so on is eligible.
- 2) The provision of knee space under a sink and the insulation of the underside of the sink, drain pipe and hot water supply are eligible.
- 3) The provision of lever-type faucets with thermostatic controls for the kitchen sink is eligible.
- 4) Recessed toe space at the bottom of all base cabinets is eligible.
- 5) The provision of space for kitchen appliances, such as built-in cooking tops, ovens and dishwashers, is eligible. Except as allowed in 6), appliances, either built-in or freestanding, are **not eligible**.
- 6) Built-in countertop stoves and wall ovens are eligible.

appliances

B. The Bathroom

- 1) The modification, enlargement or redesign of a bathroom to allow access, ease of use and additional storage is eligible.
- 2) The installation of grab-bars to permit safe and comfortable use of the toilet, shower and bathtub is eligible.

grab-bars

bathtub
lifts

- 3) The provision of an insulated knee space under the washbasin is eligible.
- 4) Lever-type faucets for washbasins and bathtubs with thermostatic controls are eligible.
- 5) The provision of wheel-in showers with a lift up seat is eligible.
- 6) The provision of a bathtub lift or bathroom chair, portable or permanently fixed, is eligible.
- 7) The installation of hand-held faucets with flexible tubing is eligible.
- 8) The lowering of medicine cabinets and mirrors is eligible.

C. The Bedroom

- 1) The modification, enlargement or redesign of a bedroom, including additional closet and storage space, is eligible.

D. Living and Dining Areas

- 1) The modification or redesign of living or dining areas to accommodate the disabled occupant is eligible.

E. The Laundry Room

- 1) The relocation or modification of a laundry room to provide room for independent use by a disabled occupant, such as an accessible laundry tub, a permanently fixed drying rack and sorting countertop, is eligible.
- 2) The provision of lever-type faucets with thermostatic controls for the laundry tub is eligible.
- 3) Laundry equipment, such as washers and dryers, is **not eligible**.

SECTION 7. EXTENSIONS

A. General

- 1) The construction of accessible additional floor space required for the disabled person, including the finishing of unfinished areas to accommodate storage space, a bedroom, laundry room and/or bathroom or to increase the size of the existing kitchen, is eligible.
- 2) Extensions shall comply with Part 9 of the *National Building Code of Canada* and CMHC's *Technical Builders' Bulletin*.
- 3) Extensions for any other purpose, such as recreational space, hobby rooms and so on, are **not eligible**.
- 4) The dimensions and size of the extension should be according to those cited in *Housing Disabled Persons, A Modification Checklist* and *Barrier Free Design*.

SECTION 8. THERAPEUTIC AND TREATMENT ITEMS

- 1) The repair or installation of therapeutic or treatment-related items, such as swimming pools, saunas, whirlpools and other related equipment, is **not eligible**.

SECTION 9. PORTABLE EQUIPMENT/FURNISHINGS

- 1) Portable equipment, such as hydraulic bath lifts or bathroom chairs, designed specifically to permit access to permanently installed basic facilities within the dwelling is eligible.
- 2) Portable equipment designed for mobility purposes or care, such as wheel chairs, walkers, dialysis equipment and so on, is **not eligible**.

- 3) The provision of space for portable equipment in 2) above is eligible.
- 4) Freestanding air purifiers and humidifiers, window-installed air conditioners, household furnishings, draperies, area rugs and so on are **not eligible**.

SECTION 10. MULTIPLE UNIT BUILDINGS

A. Signage

- 1) Appropriate exterior signs with large simple lettering on a high contrasting background, back lit signs and raised lettering or braille to indicate the address are eligible.

B. Vestibules

- 1) The installation of 2 sets of automatically opening doors at the vestibule of multiple unit rental buildings is eligible.
- mailboxes 2) The installation of accessible, lowered mailboxes with appropriate signs is eligible.
- intercom 3) The installation of accessible intercom systems with the microphone at an appropriate height in the entrance of multiple unit buildings is eligible.
- 4) The installation of colored strips at eye level on large glass surfaces is eligible.

C. Common Areas

- ramps 1) The construction of ramps to overcome small differences in levels to common areas, such as lobbies, game rooms, public toilets, laundry rooms and storage rooms, is eligible.
- 2) The installation of an elevating device, such as a stair glide, is eligible.

- | | |
|----------------------|--|
| elevators | 3) The installation of an elevator to accommodate large differences in levels where a ramp is not feasible is eligible. The turning space in the elevator must be sufficient to allow a person in a wheel chair to turn around. The installation of the elevator must be in accordance with the authority having jurisdiction. |
| | 4) The installation of controls and signaling devices in elevators appropriate for disabled occupants is eligible. |
| protective surfacing | 5) Protective surfacing, such as wainscoting and corner moldings, to protect walls and corners in areas of high usage from wheel chair wheels and footplates is eligible. |
| public washrooms | 6) The modification of a public washroom in a multiple unit residential building to accommodate wheel chair access is eligible. |
| | 7) The provision of knee space with insulated pipes under the sink and lever-type faucets is eligible. |
| laundry facilities | 8) The modification of a laundry room to provide room for independent use by disabled occupants, such as an accessible laundry tub, a permanently fixed drying rack and sorting countertop, is eligible. |
| | 9) Laundry appliances, such as a washer and dryer, are not eligible for RRAP funding. Note: For modifications to the interior of rental units, use the eligibility criteria outlined in previous sections. |

APPENDIX A SPECIFIC DISABILITIES

Disability Categories

The 6 major categories of disabilities that have implications for housing are:

- visual,
- hearing,
- cognition,
- mobility,
- allergy-related, and
- others.

Visual Disabilities

Visual disabilities may arise from congenital conditions, disease or deterioration brought about by aging or accident. There are many different kinds of visual disabilities. Visual impairment and blindness are described below.

Visual Impairments: People with serious visual impairments may experience problems with distance vision or visual acuteness, blurring or tunnel vision. Some conditions may be stable, while others may deteriorate.

Blindness: The legally blind may have some vision or sensitivity to light, while the totally blind have no vision at all. Some blind people use a white cane or a guide dog for assistance. Some may also read braille. Most blind people rely on a highly developed sense of hearing.

Hearing Disabilities

A hearing disability can range from hard of hearing to deafness. Many hearing-impaired persons are able to function normally with hearing aids. However, they are at risk only when they are not wearing a hearing aid, for example, while sleeping or in the shower. People who have severe hearing disabilities may have speech difficulties as well because they are unable to judge their own voice volume or sound formation. As a result, they may be socially isolated. A deaf person may lip-read and use sign language.

Cognition Disabilities

There are a variety of cognition disabilities as a result of congenital, acquired or traumatic conditions that cause difficulties in learning, understanding, remembering and using

information. There is a great variation in the ability of people with cognition disabilities to live independently. Some can improve with training and therapy and many live in the community with help from their families.

Because of difficulties in processing information, people with cognition disabilities prefer familiar surroundings and known routines. It is advantageous for them to live near facilities, such as schools, rehabilitation centres and work opportunities. Familiar and easy-to-recognize visual elements are important for orientation.

Mobility Disabilities

There are many congenital and disease or injury-related conditions that result in motion or mobility impairments. These conditions may involve a single disability or multiple disabilities. Often the main disability is accompanied by other less visible disorders. Some of these conditions lead to such things as reduced stamina or strength, while others may result in partial or complete paralysis. Some conditions make these people susceptible to infections, such as lung or urinary tract infections. People with these conditions may use technical aids, artificial limbs, walking aids or wheel chairs.

The disability-related characteristics of a number of common conditions that need specially designed environments are briefly described below.

Cerebral Palsy (CP): People with CP may have poor muscular control, spasms, loss of movement and other perceptual difficulties.

Multiple Sclerosis (MS): In addition to general weakness, people with MS may have difficulties with balance and muscular control, loss of sensation and severe weakness.

Muscular Dystrophy (MD): This is a progressive disease that can affect the back, arms and legs and results in movement difficulties.

Parkinson's Disease: This condition affects older people. It results in movement difficulties due to lack of muscular control, tremors and loss of motion.

Rheumatism: Rheumatism can be acute, chronic or associated with age. Rheumatic fever can affect the function of the heart. A person may suffer from stiffness, painful movement, swollen joints and movement difficulties.

Arthritis: This condition, affecting joints, can cause joint deformities, painful movement and loss of movement in the affected

area. It may also be accompanied by loss of strength when gripping or manipulating something with an affected hand.

Poliomyelitis: Since a preventive vaccine is now available, the number of cases among the present generation has diminished. This viral disease can result in muscle wasting and loss of movement.

Stroke: Depending on which area of the brain is affected as a result of a stroke, people may have loss of movement on one side of the body as well as perceptual and speech difficulties.

Congenital deformities: Congenital disabilities can result from a variety of causes, including oxygen starvation of brain cells and toxicity during pregnancy (for example, the use of thalidomide). Such people may have organs, such as the heart or kidney, that are improperly developed, poorly formed or missing extremities.

Loss of limbs: People may have movement difficulties due to loss of limbs as a result of war injuries, accidents and amputation. People who cannot manage with an artificial lower limb may use a wheel chair.

Spinal cord injuries: The degree and type of movement loss depends on the extent of injury and its location on the spinal cord. Such people may lose control of bowel and bladder functions and suffer paralysis and loss of sensation below the site of the injury.

Allergy-related Disabilities

The most common allergies are caused by dust, moulds and animal dandruff, but reactions can also be caused by metals, such as nickel, chemicals, such as printing ink, substances, such as rubber, emissions, such as cigarette smoke, and fumes from paint or perfumes. The allergic reaction may be asthma, hay fever, exzema or stomach disorders. People with allergic reactions that are severe enough to cause breathing difficulties and physical weakness require a protected environment. They are considered disabled and are often sequestered at home, unable to use public transportation or go to school or work. They have secondary problems due to social isolation.

Other Disabilities

A number of conditions do not fit into the above categories and do not resemble each other in the disabling condition or design modification required. Each is therefore discussed separately.

Hemophilia: Due to problems associated with frequent, easily induced and severe internal and external bleeding, the hemophiliac must be protected from slipping, falling, bumping or otherwise injuring the body. Mobility may be impaired by bleeding into a joint.

Cystic Fibrosis (CF): Due to breathing and digestive difficulties, people with CF have little physical strength or stamina and are unable to maintain the sustained activity required for walking long distances or climbing stairs. They are prone to pulmonary infections. They perspire heavily and so must change their clothing frequently.

Epilepsy: Epileptic seizures are unpredictable and variable in strength and duration. For the most part, people subject to seizures can lead normal lives with regular medication.

Dwarfism: Some people with hormonal imbalances do not grow to normal stature and have body proportions that relate poorly to their size. They are susceptible to infections but otherwise are able to live independently in homes that are modified to meet their needs.

Kidney problems: People with severe kidney disease or deterioration require dialysis to function normally. Though dialysis machines are expensive because of the length (several hours) and frequency of treatment (2 to 3 times a week), many prefer to have machines at home. Assistance may be required in order to use the machine.

Excretion problems: The conditions associated with excretion problems, such as paralysis or colostomies, may require people to rely on excretory bags, catheters or pads. High standards of personal hygiene are required to avoid infection and to maintain sanitary conditions.

Heart and lung conditions: Residents with severe heart (angina) and lung conditions (emphysema) are unable to maintain sustained activity, such as walking long distances or climbing stairs. They may also experience palpitations, shortness of breath and general weakness affecting their performance in daily activities.

Age-related disabilities: Many changes as a result of normal aging create minor or multiple disabilities that affect an older person's ability to live independently. Loss of strength, dexterity and movement, and changed perceptual capabilities are common.

APPENDIX B PUBLICATIONS REFERENCED IN THIS BROCHURE

1. *National Building Code of Canada* (NRCC No. 30619) and the *Supplement to the National Building Code of Canada* can be purchased from:

Associate Committee on the National Building Code of Canada
National Research Council of Canada
Ottawa, Ontario
K1A 0R6

2. Publications from the Canadian Standards Association can be purchased from:

Canadian Standards Association
178 Rexdale Boulevard
Rexdale, Ontario
M9W 1R3

3. *A Modification Checklist — Accessibility Using RRAP for the Disabled* (NHA 5895), *Housing Disabled Persons* (NHA 5467), *How to Hire a Contractor* (NHA 5429), *Inspection Checklist for Maintenance and Repair* (NHA 5731), *Safety in the Home* (NHA 5186) and *Maintaining Seniors Independence* (NHA 6165) can be purchased from:

Canada Mortgage and Housing Corporation
Publications
682 Montreal Road
Ottawa, Ontario
K1A 0P7

